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ABSTRACT

This commencement address reflects on what students should learn in a core curriculum, what good learning environments should be like, and what quality teaching will look like in the future. It examines changes in education over the years, discussing the transformation in teaching and learning brought about by information technology. In this information-laden world, it is essential for teachers to prepare students with tools to interpret information and manage its meaning in their technology-driven lifestyles. Ultimately, instruction should be designed to help students understand how they learn best, allowing them to experiment with numerous learning strategies. Successful students should be able to demonstrate they have learned and understood the processes involved in establishing a long memory, associating information with previous knowledge, and using mnemonic devices to stimulate memory. Mentoring and guiding individuals as they enhance their learning strategies becomes the focus of teaching. With today's communication tools, teachers should be able to construct learning contexts that appeal to the learning styles of 21st-century students. Communications technologies are the catalyst for a paradigm shift in the delivery of education that is inextricably linked to the political, technological, social, and economic context of American education. (SM)

M.R. Howard-Vital

"Teaching and Learning in the 21st Century,"
by

Michelle R. Howard-Vital, Ph.D.

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Distinguished Alum Address presented at the College of Education
Commencement, University of Illinois at Chicago
May 7, 2000

I especially thank Professor Herbert Walberg, a prolific scholar and mentor, for inspiring me to employ a variety of tools to observe carefully (and for nominating me for the Distinguished Alum Award). My capacity to explain, connect the dots, and engage in public conversations that ultimately affect lives continues to grow... thanks to his encouragement. I thank, also, my other professors and peers at UIC for illuminating the utility of seeing from diverse perspectives.

Almost 20 years ago, I remember sitting in academic regalia in a similar setting, hoping, that I would not trip on the way to the stage and equally hoping that there was not someone engaged in a last minute statistical review of my analysis.... (Relax graduates, it is really happening, and you have earned it!)

Shortly after commencement, I remember my first job interview with a vice president of academic affairs who had earned his doctorate in psychology. This vice president stated to me "you seem to be a very bright,

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young woman, why didn't you earn a real doctorate, in a real discipline, instead of one in "public policy analysis."

Years later, after engaging in much discourse about what students should learn in a core curriculum, analyzing academic policies, establishing distance learning environments, and participating in institutional accreditation studies, I continue to ponder that profound question along with... How will our grandchildren learn? What content will they learn? What will be considered "quality" in teaching and learning, for them?

Graduates, what an exciting time it is to be thinking about teaching and learning! Twenty years ago, I sat timidly at a computer terminal requesting that the mainframe computer ... please read my input data; I was grateful that I did not have to transport trays of key punched cards to feed the computer like some of my friends who were only a couple of years ahead of me. Today my eleven-year-old daughter uses her IMAC to search the Internet for information, to keep what looks like a group diary to me, to draw, to construct PowerPoint presentations for her fifth grade class, and to learn vocabulary words while searching for Carmen Santiago.

In a recent article in Change magazine, John Seely Brown, the chief scientist at Xerox and director of a Research Center in California affirms that we

(particularly you, graduates) are at the beginning of a tremendous transformation in teaching and learning.

Communication technologies (are only half the story, but they) are connecting us to expertise of faculty and to the expertise of "the community mind." The community mind is comprised of a diverse group of persons with diverse perspectives and levels of knowledge. Individuals learn through dynamic dialogue. They share information, tell stories, critique each other, and listen to the dialogue of others. The Internet, additionally, makes it easier for faculty to mentor and advise students, when they are not in class. Observing this type of learning and communication, some of us are beginning to see new possibilities for designing learning environments.

In our information-laden world, it is essential for teachers to prepare students with tools to interpret information and manage its meaning in their technology-driven lifestyles. With the use of computer software, we can individualize instruction and connect learners. Much like the popular video games, students can progress to the next lesson or concept when they have "learned" or attained mastery, and they can share their experiences along the way.

Ultimately, instruction should be designed so students understand how they learn (processes) and how they learn best (techniques). Students should experiment with numerous learning strategies

(mnemonic devices, CD-ROM's, self-testing, e-books, computers, traditional books, and so forth). "Successful" students would demonstrate they have "learned" and understand the processes involved in establishing a long term memory, associating information to previous knowledge, using mnemonic devices to stimulate memory, and so forth). Mentoring and guiding individuals as they enhance their learning strategies becomes the focus of teaching.

It is my hope that with these communication tools, teachers can construct learning contexts that appeal to the learning styles of students of the 21st century (who are like my daughter). Communications technologies will enhance teachers' abilities to provide our next generation students with up-to-date assessments of their competencies and learning styles. This will give teachers more time to be the mentor in the middle; a role that is so valuable to students. (The encouragement and support of a mentor, like Professor Walberg cannot be overstated.)

Many of my colleagues believe that communication technologies are the catalyst for a paradigm shift in the delivery of education that is inextricably linked to the political, technological, social and economic context of American education. The ability to deliver content in a multisensory format to a fluid community of learners changes the teaching and learning environment, the role of the faculty and student in the learning and assessment processes, and in some cases who offers

educational programs.

For the vice president who wondered about the discipline of public policy analysis, the transformation of higher education is laden with policy issues. For example, what are the economical and political issues entangled with a community of learners? I do think I will have any problems finding meaningful work.

There are many trying to understand and explain this evolution in education. Our community knowledge is being shaped by the wisdom of our faculty, products of computer companies, professional organizations, young consumers, accrediting organizations, and many others.

This is certainly just the beginning of our journey into the 21st century. Graduates, some of you might be mentoring our grandchildren as they learn. I envision that our grandchildren will live in a world where they will contribute to and learn from the community mind. Learning how to learn will be a never ending process. Our grandchildren will participate in a diverse learning community that harnesses the talents and resources of many to improve the quality of lives everywhere.

Graduates you are joining persons from around the globe in defining a new paradigm for education in the 21st century, and for that.... I thank you.

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